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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,424	12/12/2000	Shiro Kamiyama	Q-62080	7790

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EXAMINER	
SHOSHO, CALLIE E	
ART UNIT	**PAPER NUMBER**
1714	5

DATE MAILED: 01/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/719,424	KAMIYAMA ET AL.	
	Examiner	Art Unit	
	Callie E. Shosho	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-8 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Information Disclosure Statement

1. It is noted that all the references cited on the IDS filed 5/14/01, Paper No.3, have been stricken as being redundant since all the references were previously cited on the IDS filed 12/12/00, Paper No. 2.

Claim Objections

2. Claim 7 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). In the present case, claim 7 refers back to claim 6, which is also a multiple dependent claim.

In accordance with MPEP § 608.01(n), due to the presence of improper multiple dependent claims, claim 7 should not be further treated on the merits. However, in the interest of "compact prosecution", claim 7 has been treated as if they were corrected to be in proper multiple dependent form, and 102 and 103 rejections as set forth in following paragraphs are given.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claim 2, line 4 recites "rubber-like polymer". The scope of the claim is confusing because it is not clear what is meant by "rubber-like". What types of polymers are encompassed by this phrase? How are the polymers like rubber and how are they not?

(b) Claim 2, lines 10 –11 (17-18) recite the use of monomer (iii) "when necessary". The scope of the claim is confusing because it is not clear what is meant by "when necessary", i.e., when would it be necessary to use such a third monomer? Under what conditions would the use of monomer (iii) be required?

(c) Claim 3 recites "wherein the polyamide elastomer (B) is obtainable by..". The scope of the claim is confusing because it is not clear whether the polyamide elastomer is actually obtained by the reaction product recited in claim 3 or must only be capable of being obtained by this reaction. It is suggested that in line 2, "obtainable" is replaced with "obtained".

(d) Claim 3, line 6 recites "nylon mn salt (m+n > 12)." The scope of the claim is confusing because it is not clear why m+n > 12 is in parentheses. It is suggested that the phrase is re-written as "nylon mn salt wherein m+n >12".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-
(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 04337334. either alone, or alternatively, in view of the evidence given in Incorvia et al. (U.S. 5,534,192).

Pending written translation, and upon consultation with a translator in the USPTO Translation Branch, it is noted that JP 04337334 discloses a resin composition comprising 1-40 parts polyamide elastomer, i.e. polyetherester amide, 5-99 parts graft copolymer which is obtained by polymerizing monomers including styrene and acrylonitrile, in the presence of polymer such as polybutadiene, 0-50 parts modified vinyl type polymer including copolymers containing at least one ethylenically unsaturated monomer wherein the polymer contains at least one functional group such as carboxyl, epoxy, or amino group, and 0.01-10 parts alkali metal salt such as potassium thiocyanate. It is further disclosed that the polyetherester amide is made by reacting polyol such as polyethylene glycol with aminocarboxylic acid (abstract, col.2, lines 29-41, col.4, lines 1-6, col.11, lines 15-27, and col.12, lines 17-21).

Although there is no explicit disclosure that the formed resin article disclosed in JP 04337334 is excellent in electrostatic coatability, one the one hand, given that JP 04337334 discloses a composition identical to that present claimed, it is clear that the article formed from such composition would inherently possess electrostatic coatability as presently claimed.

Alternatively, on the other hand, JP 04337334 discloses an antistatic resin composition and it is well known as found in Incorvia et al., that antistatic agents are used to enhance the receptivity of surfaces to electrostatically applied coatings (col.2, lines 6-9), and thus it is clear that the formed article of JP 04337334 is excellent in electrostatic coatability as presently claimed.

In light of the above, it is clear that JP 04337334 anticipates the present claims.

7. Claims 1-4 and 6-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Ueda et al. (U.S. 5,886,098) either alone, or alternatively, in view of the evidence given in Incorvia et al. (U.S. 5,534,192).

Ueda et al. disclose a resin composition comprising 2.91-38.8% polyamide elastomer, i.e. polyetherester amide, 60-97% graft copolymer which is obtained by polymerizing monomers including styrene and acrylonitrile, in the presence of polymer such as polybutadiene, 0-40% modified vinyl type polymer including copolymers containing at least one ethylenically unsaturated monomer wherein the polymer contains at least one functional group such as carboxyl, epoxy, or amino group, and 0.09-1.2% alkali metal salt. It is further disclosed that the polyetherester amide is made by reacting polyol such as polyethylene glycol with aminocarboxylic acid or lactam (col.2, lines 36-46, col.3, lines 1 and 16-18, col.4, lines 10-16, 48-55, and 59-63, col.5, lines 7-10, 26-27, and 50, col.5, line 64-col.6, line 8, col.6, lines 59-67, col.7, lines 3-55, col.8, lines 52-67, col.11, lines 14-20 and 44-48, and col.12, lines 4-7).

Although there is no explicit disclosure that the formed resin article disclosed in Ueda et al. is excellent in electrostatic coatability, one the one hand, given that Ueda et al. disclose a composition identical to that present claimed, it is clear that the article formed from such

composition would inherently possess electrostatic coatability as presently claimed. Alternatively, on the other hand, Ueda et al. disclose an antistatic resin composition and it is well known as found in Incorvia et al., that antistatic agents are used to enhance the receptivity of surfaces to electrostatically applied coatings (col.2, lines 6-9), and thus it is clear that the formed article of Ueda et al. is excellent in electrostatic coatability as presently claimed.

In light of the above, it is clear that Ueda et al. anticipates the present claims.

8. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukumoto et al. (U.S. 5,096,995) either alone, or alternatively, in view of the evidence given in Incorvia et al. (U.S. 5,534,192).

Fukumoto et al. disclose a resin composition comprising 1-40% polyamide elastomer, i.e. polyetherester amide, 1-95% graft copolymer which is obtained by polymerizing monomers including styrene and vinyl cyanide, in the presence of rubbery polymer, 1-95% modified vinyl type polymer including copolymers containing at least one ethylenically unsaturated monomer wherein the polymer contains at least one functional group such as carboxyl, epoxy, or amino group, and 0.1% alkali metal salt such as sodium dodecylbenzenesulfonic acid. It is further disclosed that the polyetherester amide is made by reacting polyol with aminocarboxylic acid or lactam (col.1, line 65-col.2, line 5, col.7, lines 48-51, col.8, lines 1-5 and 35-48, col.9, lines 5-22, col.12, lines 15-24, and example 12).

Although there is no explicit disclosure that the formed resin article disclosed in Fukumoto et al. is excellent in electrostatic coatability, one the one hand, given that Fukumoto et al. disclose a composition identical to that present claimed, it is clear that the article formed from

such composition would inherently possess electrostatic coatability as presently claimed. Alternatively, on the other hand, Fukumoto et al. disclose an antistatic resin composition and it is well known as found in Incorvia et al., that antistatic agents are used to enhance the receptivity of surfaces to electrostatically applied coatings (col.2, lines 6-9), and thus it is clear that the formed article of Fukumoto et al. is excellent in electrostatic coatability as presently claimed.

In light of the above, it is clear that Fukumoto et al. anticipates the present claims.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. (U.S. 5,886,098) in view of Kawakami et al. (U.S. 5,574,101).

The disclosure with respect to Ueda et al. in paragraph 7 above is incorporated here by reference.

The difference between Ueda et al. and the present claimed invention is the requirement in the claim of specific type of alkali metal salt.

Kawakami et al., which is drawn to resin composition comprising polyamide, disclose the use of alkali metal salt such as sodium dodecylbenzenesulfonic acid in order to improve the antistatic effect (col.7, lines 16-21 and 28-35).

In light of the motivation for using specific alkali salt disclosed by Kawakami et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use such salt in the composition of Ueda et al. in order to produce a composition with improved antistatic properties, and thereby arrive at the claimed invention.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 04337334, Ueda et al. (U.S. 5,886,098), or Fukumoto et al. (U.S. 5,096,995) either of which in view of EP 278500 and Seshadri (U.S. 5,219,493).

The disclosures with respect to JP 04337334, Ueda et al., and Fukumoto et al. in paragraphs 6, 7, and 8, respectively, are incorporated here by reference.

The difference between JP 04337334, Ueda et al., or Fukumoto et al. and the present claimed invention is the requirement in the claims that the formed resin article is electrostatically coated.

While each of JP 04337334, Ueda et al., and Fukumoto et al. disclose forming resin articles from the resin composition, there is no disclosure that these articles are electrostatically coated.

EP 278500 discloses that polyamide compositions comprising polyamide, graft copolymers, and modified vinyl polymers, such as those disclosed in either JP 04337334, Ueda et al., or Fukumoto et al. are widely used in automobile parts (page 1, lines 15-17).

Seshadri discloses that thermoplastic components used in automobile parts are commonly provided an electrostatic surface coating to produce an attractive, glossy finish (col.1, lines 15-17 and col.5, lines 63-66).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to apply an electrostatic coating to the resin articles of either JP 04337334, Ueda et al., or Fukumoto et al. in order to produce an article with improved appearance, and thereby arrive at the claimed invention.

13. Claims 1-2 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 278500 in view of Kawakami et al. (U.S. 5,574,101).

EP 278500 disclose a resin composition comprising 50-60% polyamide, 30-40% graft copolymer which is obtained by polymerizing monomers including styrene and acrylonitrile, in the presence of rubber, and 10% modified vinyl type polymer including copolymers containing at least one ethylenically unsaturated monomer wherein the polymer contains carboxyl functional group. It is further disclosed that the polyetherester amide is made by reacting polyol with aminocarboxylic acid or lactam (page 1, lines 43-55, page 2, lines 52-55, page 3, lines 8-14, and Table 1).

The difference between EP 278200 and the present claimed invention is the requirement in the claim of alkali metal salt.

Kawakami et al., which is drawn to resin composition comprising polyamide, disclose the use of 0.05-10% alkali metal salt such as sodium dodecylbenzenesulfonic acid in order to improve the antistatic effect (col.7, lines 16-21 and 28-35). It is noted that EP 278500 discloses the use of an antistatic agent in page 4, line 1.

In light of the motivation for using specific alkali salt disclosed by Kawakami et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use such salt in the composition of EP 287200 in order to produce a composition with improved antistatic properties, and thereby arrive at the claimed invention.

14. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 287500 in view of Kawakami et al. as applied to claims 1-2 and 4-7 above, and further in view of Seshadri (U.S. 5,219,493).

The difference between EP 287500 in view of Kawakami et al. and the present claimed invention is the requirement in the claims that the formed resin article is electrostatically coated.

While EP 287500 discloses forming resin articles from the resin composition, there is no disclosure that these articles are electrostatically coated. However, EP 278500 discloses that the polyamide composition is widely used in automobile parts (page 1, lines 15-17).

Seshadri discloses that thermoplastic components used in automobile parts are commonly provided an electrostatic surface coating to produce an attractive, glossy finish (col.1, lines 15-17 and col.5, lines 63-66).

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to apply an electrostatic coating to the resin articles of EP 278500 in order to produce an article with improved appearance, and thereby arrive at the claimed invention.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Uehara et al. (U.S. 5,169,899) and Yamashita et al. (U.S. 5,798,403) each disclose resin composition comprising polyamide, graft copolymer, and modified vinyl polymer as presently claimed, however, there is no disclosure in either reference of alkali metal salt.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Callie E. Shosho
Examiner
Art Unit 1714

Callie Shosho

Callie Shosho
January 18, 2002